Pioneer

**DVD PLAYER** 

# 

**Operating Instructions** 

# CONGRATULATIONS ON YOUR PURCHASE OF THIS FINE PIONEER PRODUCT.

Pioneer is on the leading edge of DVD research for consumer products and this unit incorporates the latest technological developments.

We are sure you will be fully satisfied with the DVD player.

Thank you for your support.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

# **IMPORTANT NOTICE**

# [For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

**CAUTION:** This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN THE STANDBY POSITION.

## [For Canadian model]

**CAUTION**: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection, against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

#### CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- · The use of optical instruments with this product will increase eye hazard.

# [For Canadian model]

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### [Pour le modèle Canadien]

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

This player is not suitable for commercial use.

# **IMPORTANT**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is

RETAIN INSTRUCTIONS - The safety and operating instructions should be retained for future reference. **HEED WARNINGS** — All warnings on the product and

in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use structions should be followed

CLEANING — Unplug this product from the well outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other

volatile liquids since they may corrode the cabinet. ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use mounting accessory recommended by the manufacturer.

CART - A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofe, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION - The appliance should be installed in a

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

#### **GROUNDING OR POLARIZATION**

If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrican to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. It will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords

should be routed so that they are not likely to be welked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where

OUTDOOR ANTENNA GROUNDING - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article \$10 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, aize of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure

LIGHTNING - For added protection for this product during alightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product e to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power

extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY - Never push objects of my kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never soil tiquid of any kind on the product.

SERVICING - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all

servicing to qualified service personnel

DAMAGEREQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions

When the power-supply cord or plug is damaged if liquid has been spilled, or objects have tallen into

the product

If the product has been exposed to rain or water

If the product does not operate normally by tokenzing the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its ormal operation

If the product has been dropped or damaged in any

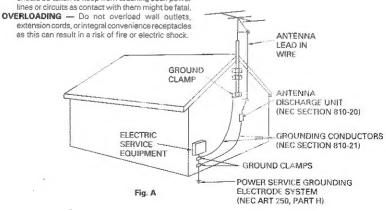
When the product exhibits a distinct change in

performance—this indicates a need for service
REPLACEMENT PARTS—When replacement parts
are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric r other hazerds

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or calling

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products finducting amplifiers) that produce heat



NEC -- NATIONAL ELECTRICAL CODE

# Bannes:

DVD, Video CD and CD discs can be played back on PIONEER DVD players. For the discs compatible with this player, refer to page 45.

# Compatible with a wide range of DVD audio output formats

DVD discs are recorded in one of the following four types of digital audio formats (as of October 1998). The digital audio output jacks of this player output any of the following digital audio signals.

#### **DOLBY DIGITAL\***

Surround system for theaters. By connecting this unit to a Dolby Digital decoder, an AV amplifier or a receiver with a built-in Dolby Digital decoder, DVD discs recorded in Dolby Digital audio can be played back in Dolby Digital surround sound.

#### DTS\*\*

Surround standard different from Dolby Digital. This format is already in use in many theaters. By connecting this unit to a DTS decoder, an AV amplifier or a receiver with a built-in DTS decoder, the DTS audio of DVD discs recorded in this format can be enjoyed. However, audio will not be output from the analog audio output jacks.

#### MPEG

By connecting this unit to an MPEG decoder, an AV amplifier or a receiver with a built-in MPEG decoder, the MPEG audio of DVD discs recorded in this format can be enjoyed.

#### Linear PCM

Same digital audio format as on CDs. Digital audio can be enjoyed by connecting this unit to an amplifier with a built-in D/A converter. Additionally, 2 channel analog audio is output from the audio output jacks.

This player has a conversion function for converting Dolby Digital and MPEG audio into the Linear PCM format. This allows playback of CDs with the regular playback system without the need for a special converter.

# On-screen operation using menu screens (GUI: Graphical User Interface)

On-screen menus allow you to make and change various system settings as well as customize various aspects of DVD disc performance. DVD discs are usually recorded with original interactive menus uniquely related to the content of the disc. The PIONEER player's internal menu functions operate in conjunction with existing disc menus and also with discs that have not been recorded with menus.

# A wide range of DVD features are available for your enjoyment

Multiple Languages (page 32) ≠

You can select the desired language with discs that have multiple language soundtracks recorded on them.

## Multi-Language Subtitles (page 33) ☆

You can select a desired subtitle language when watching movies and other videos with subtitles available.

#### Multi-Aspect (page 25)

For discs recorded in wide screen formats, the screen size can be selected from among the Wide, Letter Box and Pan & Scan formats.

#### Multi-Angle (page 34) ☆

Lets you view scenes from different camera angles.

#### Parental Level (page 23)☆

Lets you select a "parental level" (user restriction level) to prevent children from viewing undesirable material.

## Energy-saving design

- · This unit is designed to use minimal electricity when power is switched OFF (during Standby).
- Regarding the value of the power consumption in standby mode, refer to "Specifications" on page 54.
- Manufactured under license from Dolby Laboratories. "Dolby", "AC-3" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works, © 1992-1997 Dolby Laboratories, Inc. All rights reserved.
- \*\* "DTS" and "DTS Digital" are trademarks of Digital Theater Systems,
- \* This mark indicates this may not be possible with certain discs.

This product incorporates copyright protection technology that is protected by method claims of certain U. S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

# **How to Use This Manual**

Explanations in this manual are grouped into the following 5 sections:

# **GETTING SET UP**

This section confirms and identifies accessories, explains how to load batteries in the remote, provides a visual guide to the remote and the player including brief descriptions of buttons, functions and displays, and describes various methods of setting up your player.

# **GETTING STARTED**

This section covers basic operations of this player, such as playback, advancing forward and backward through tracks/chapters, stopping playback and switching power to the standby position.

#### CUSTOMIZING

This section explains how to use the on-screen menus to edit the various system settings such as language preference, parental restriction level, monitor aspect, etc.

# **ADVANCED OPERATION**

This section explains the various search, edit, program and playback options available with this player.

# ADDITIONAL INFORMATION

This section contains other information related to the operation of this player, including a troubleshooting guide, a list of terms used in this manual, and system specifications.

$\cdots \otimes \cdots \otimes$	
Before Using	
Checking Accessories	
Preparing the Remote Control	
Names and Functions	· · · · · · · · · · · · · · · · · · ·
Front Popul	
Front Panel	7
Display Window	8
Rear Panel Remote Control	9
Motifice Control	
Making Connections	
Connecting Your DVD Player	
Getting Started Using Your DVD	Player 16
Playing DVDs, Video CDs and CDs	
Chapter (Track) Skip Forward/Skip B	ank 10
Stopping Playback and Switching Pa	nwer Off 10
approximate approximate of the property of the	
Customizing DVD Performance	20
About the Main Menu	20
Changing Picture and Sound Quality	/ 27
Memorizing Settings for Often View (Condition Memory)	ed DVDs
About the Title Menu and Menu Scre	
Selecting Languages (Multi-Language	
Changing Audio Type	32
Selecting a Subtitle Language (Multi-Language Subtitles)	
Viewing from a Desired Camera Ang (Multi-Angle)	le
Viewing Disc Information	35
The second secon	A Million A Million
Advanced Operation	36
Continuing Playback from Where You	u Stopped 36
Searching for a Desired Video Scene (Title Search)	
Searching for a Desired Video Scene (Chapter/Track Search)	Audio Track
Playback in a Desired Order (Progran	n Play) 40
Repeat Play	
Still Frame/Slow Play/Frame Advance	Playback . 43
Random Play	
Additional Information	45
Disc Types Compatible with This Unit	
Differences in Disc Composition	45
Disc Care	
For Proper and Long Use of This Unit	
Language Code List	
Troubleshooting	
Terms	
Specifications	54

# **Checking Accessories**

Please confirm that the following were received with the player.











Audio cord

Video cord

Power cord

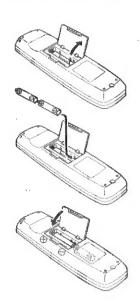
Remote control unit

AA/R6P batteries x 2

#### Other included items:

· Operating instructions (this manual)

# **Preparing the Remote Control**



# Inserting batteries into the remote control

- 1 While pressing the back cover, pull out in the direction indicated by the arrow.
- 2 Insert batteries.

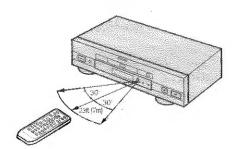
Make sure to match the plus (+) and minus (-) polarity guides on the batteries with the marks inside the battery compartment.

# 3 Close the cover.

#### Notes

- · Do not mix old and new batteries.
- · When replacing batteries, use all new batteries.
- When not using the remote control for a long period of time (over 1 month), remove the batteries to avoid possible damage from battery corrosion. If battery leakage occurs, wipe the battery liquid from the battery component, then insert new batteries.

# Remote control operation

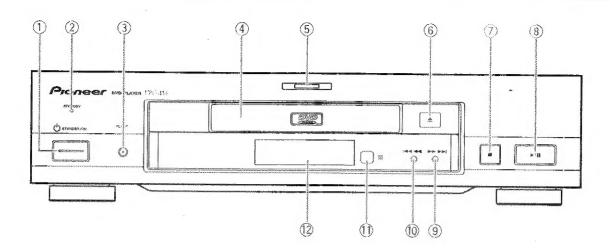


When operating the remote control, point it at the remote sensor (3) located on the player's front panel. The remote control can be used up to 23 feet (7 m) from the player and within a 30° angle on each side of the sensor.



- Exposing the remote sensor to direct sunlight or strong light may cause faulty operation.
- If the CONTROL IN jack on the player's rear panel is connected to another component, point the remote control at that component to operate. Operation will not be possible when pointed at this player (page 12).

# **Front Panel**



# ① **OSTANDBY/ON** switch

Press to switch the player on or to put in standby (pages 16 and 19).

# 2 STANDBY indicator

Lights when the player is in standby (pages 16 and 19).

# 3 FL OFF button and indicator

Press to turn off fluorescent display window and disc illumination. FL OFF indicator lights when this function is on.

# 4 Disc tray

Place discs in the disc tray with the label side facing up (pages 16 and 19).

# **5** Disc illumination

Lights when a DVD is loaded and when no disc is loaded. Turns off when a disc format other than DVD is loaded in the player.

# ⑥ ▲ (open/close) button

Press to open and close the disc tray (pages 16 and

# ⑦ ■ (stop) button

Press to stop playback (pages 19 and 20).

# (8) ►/II (play/pause) button

Press to start playback. Press during playback to pause. Press again to resume playback (page 16).

# ⑨ ▶▶▶ (forward) button

Press to advance to chapters/tracks. Press and hold to perform fast-forward scanning (page 18).

# 10 Iddd (reverse) button

Press to go back to previous chapters/tracks. Press and hold to perform reverse playback scanning (page 18).

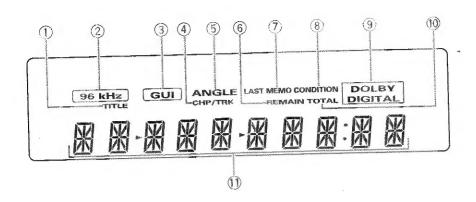
## 11 Remote sensor

Point the remote control toward the remote sensor to operate the player (page 6).

# ② Display window

(page 8)

# **Display Window**



1 TITLE indicator

Indicates a title is being displayed (page 16).

2 96 kHz indicator

Lights during playback of a disc with a sampling frequency of 96 kHz (page 26).

③ GUI (Graphical User Interface) indicator

Indicates an on-screen menu operation is being performed (pages 20 to 26).

**4** CHP/TRK indicator

Indicates that a chapter/track is being displayed (page 16).

**5** ANGLE indicator

Indicates Multi-Angle playback is in progress (page 34).

**® REMAIN indicator** 

Indicates remaining playback time (page 35).

**⑦ LAST MEMO indicator** 

Indicates the Last Memory location is recorded in memory (page 36).

**® CONDITION indicator** 

Indicates that Condition Memory playback settings are memorized (page 29).

**9 DOLBY DIGITAL indicator** 

Indicates Dolby Digital audio playback (page 26).

10 TOTAL indicator

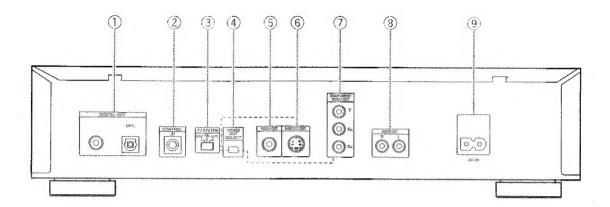
Indicates that the total elapsed playback time of 

in disc is displayed (page 35).

1) Counter display

Displays the playback mode, type of disc, title and chapter numbers, playback time, etc.

# Rear Panel



# 1 DIGITAL OUT jacks (coaxial, optical (OPT.))

Use to output of the digital audio signal recorded on discs. You can output the digital signal via either coaxial or optical output jack to an AV amplifier or receiver with a built-in decoder (pages 12 to 14).

# 2 CONTROL IN jack

Use to connect this player to another component bearing the Pioneer mark. This lets you control this unit as though it were a component in a system. Player operations are then performed by pointing the remote control at the component that the player is connect to (page 12).

# ③ TV SYSTEM switch (except for U.S. and Canadian models)

Use to change the TV signal mode according to the type of TV and disc to be used (page 15).

#### 4 VIDEO OUT SELECT switch

Use to set which output is used to output the video signals. You can select either video/S-Video or component video signal output (page 15).

# **5 VIDEO OUT jack**

Connect to the video input on a TV or monitor. To use this output, be sure to set VIDEO OUT SELECT to the left position (pages 12, 13, and 15).

# **6 S-VIDEO OUT jack**

If your TV or monitor has an S-video input, clearer picture reproduction is possible by connecting the player to your TV or monitor via the S-Video jack. To use this output, be sure to set VIDEO OUT SELECT to the left position (pages 12, 13, and 15).

# **⑦ COMPONENT VIDEO OUT jacks**

If your projection monitor or projector has component video inputs, you can produce a higher quality picture on your Projection Monitor or projector by connecting to the component video outputs on this unit. When using these jacks, be sure to set VIDEO OUT SELECT to the right position (pages 12 and 15).

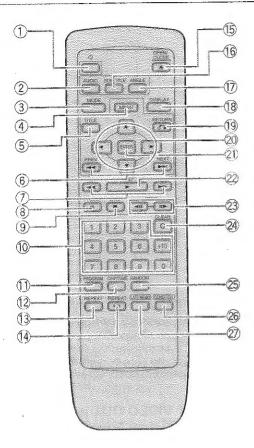
# 8 AUDIO OUT jacks

Connect to output two-channel audio (anado) to the audio inputs on a TV or other stereo amplifier (pages 12 to 14).

# AC IN power cord connection terminal

Use to connect the power cord to the wall outlet (page 13).

# **Remote Control**



(Buttons indicated with \* are used for menu operation.)

# 1 🐧 (standby/on) button

Press to switch the player on or to put in standby (pages 12, 16, and 19).

# 2 AUDIO switching button

Press repeatedly to select one of the audio languages programmed on a DVD (page 32).

## **3 MODE button**

Press repeatedly to select one of the following modes: Mode, Pause Mode, and Audio DRC (Audio Dynamic Range Control) (pages 27 and 28).

# (4) MENU button\*

Use to display or close menu screens. Press during DVD playback to display the menu programmed on the disc. Press during stop mode to display the player's main menu screen (pages 20 to 26, and 29 to 31).

# ⑤ TITLE button\*

Use to do a title search. Press TITLE and then press the number button of the title number you wish to view. Playback of that title begins immediately (page 37).

# ⑥ PREV I→→/NEXT ►→I (previous/next) buttons\*

During playback, press PREV → to go back to a previous chapter/track and NEXT → to advance to the next chapter/track. When using menus, press NEXT → to go to the next page and PREV to go to the previous page (in multiple page menus) (pages 18 and 21).

# ⑦ REV ◄◄/FWD ►► (fast reverse/forward) buttons

During playback, press REV ◀◀ to perform fast reverse scanning and FWD ►► to perform fast forward scanning of the disc. When a CD is loaded, audio scanning is performed (page 18).

#### **® PAUSE II button**

Press to pause playback of a disc. Press again to resume playback.

#### STOP ■ button

Press to stop playback (pages 19 and 20).

# 10 Number buttons (1-9, 0, +10)

Use to perform direct title and chapter/track searches, to input numerical values, and to make direct menu selections and implement new settings. When using menus, pressing number buttons performs the same function as selecting with the direction buttons and pressing ENTER.

# (1) PROGRAM button

You can program titles, chapters, or tracks to play back in a desired order. Programs can be a maximum of 24 steps (pages 40 and 41).

# (2) CHP/TIME (chapter/time) button

Press once to perform a chapter search and twice to perform a time number search (pages 38 and 39).

## **13 REPEAT button**

Press once to repeat playback of current chapter/ track. Press twice to repeat playback of current title (page 42).

## (14) REPEAT A-B button

Press at the beginning and end of the section you want to repeat (page 42).

## (5) OPEN/CLOSE ▲ button

Press to open or close the disc table (pages 16 and 19).

# **16 SUBTITLE button**

Press repeatedly to select one of the subtitle languages programmed on a DVD or to turn the subtitles off (page 33).

# (7) ANGLE button

Some DVDs are recorded with various camera angle playback options. Press ANGLE repeatedly to display different camera angles (page 34).

#### 18 DISPLAY button

Press during playback to display statistical disc information. Pressing repeatedly displays different information. The number of displays that appear depends on the disc format (page 35).

#### 19 RETURN & button\*

Use to go one menu screen back (new settings are memorized). Use RETURN when you want to change multiple settings in the main menu (page 21).

# 20 Direction buttons (◄/►/▲/▼)\*

Use to select options on menu screens (pages 16, and 21 to 31).

# ② ENTER button\*

Use to implement settings selected with the direction buttons or to set items highlighted in a menu (pages 21 to 31).

#### 22 PLAY ▶ button

Press to start disc playback (page 16).

# ② STEP **◄॥/॥** buttons

Press STEP II► during playback to view slow playback. In pause mode, press STEP II► to advance DVDs and Video CDs frame by frame and STEP ◄II to back up a few frames at a time (page 43).

# ② CLEAR button

Works in conjunction with a number of player functions. Use to cancel repeat and random playback, and to edit programs (pages 33, 38, 41, 42, and 44).

## 25 RANDOM button

Press to play chapters/tracks in random order (page 44).

# **26 CONDITION button**

You can store in memory the settings for up to 30 DVD discs. Press CONDITION during DVD playback to memorize the settings (page 29).

# **② LAST MEMO** (last memory) button

You can resume DVD playback from the point you last watched. Press LAST MEMO during playback to set Last Memory point. When you want to resume playback of that disc, press LAST MEMO in the stop mode and playback starts from the memorized point (page 36).

# **Connecting Your DVD Player**

Unlike any other audio-visual media format, DVD offers a wide array of audio and video output options which allows playback to be enjoyed in any number of system configurations from a standard TV with stereo audio input to a home theater system with full surround sound capabilities. Because audio and video connection methods may be handled independently, explanations related to setting up each have been separated. To determine the best audio and video connection set-up for your system, use the illustrations and explanations found on the following pages and refer to the manuals supplied with the components you are making connections to.

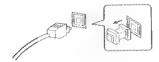
When making connections to this unit or when changing connections, check that the unit is in standby by pressing oSTANDBY/ON, and unplug the power cord from the power outlet.

# Making cable connections

Refer to the illustration below to insure correct cable connections. When making cable connections, make sure to fully insert the plugs into the terminals.

## **Audio** connections

Optical digital out (Optical fiber cable)



Coaxial digital out (Coaxial cable)



Audio out (Audio cord)



Connect plugs to the terminals that match the plug's color (white, red, yellow and black).

# Video connections

 Component video out (Component video cord or 3 video cords)



■ S-Video out (S-Video cable)



■ Video out (Video cord)



Connect the TV with S-VIDEO terminal to the S VIDEO OUT terminal of this player.

## Note

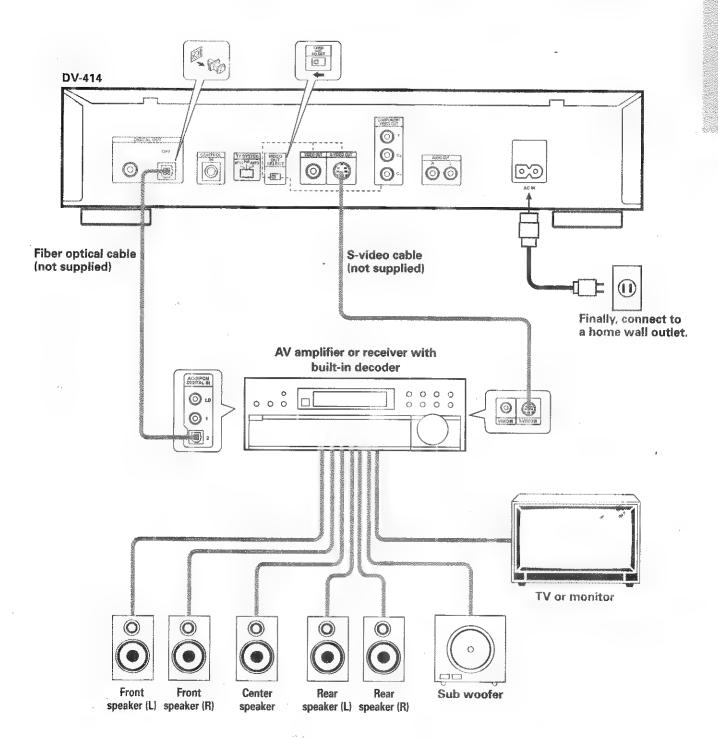
The analog video output on this player uses copy protect circuitry to prevent the video playback on DVD discs from being copied. If you connect the player to a TV via a VCR, or record and playback the contents of a disc with a VCR, the playback picture may not be normal.

#### System control connections

- When connecting to a component bearing the Pioneer mark:
   If you use a commercially available cord with a mini plug (3.5 mm dia. with no resistance) to connect this player's CONTROL IN jack to the CONTROL OUT jack of another PIONEER component bearing the mark, you can control the player as though it were a component in a system (system control).
- If you connect for system control, you cannot operate the player directly. Point the remote control unit at the component (AV amplifier, etc.) connected to the CONTROL OUT jack to operate.
- When controlling as a system, be sure to make a connection to the amplifier using an audio or video cord, even when using only digital components.
- · For details, refer to the operation manuals of the connected components.

# **Connection Guide**

This section shows a set-up ideal for presenting the audio and video capabilities of DVD. Use this illustration as a guide to setting up your home system. An explanation of each type of audio and video connection can be found on the next page.



## **Audio Connections**

This player features two digital (optical and coaxial) and analog audio output formats.

# **Digital Audio Connections:**

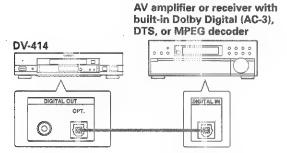
You can enjoy the digital audio recorded on DVD discs from both optical digital and coaxial digital output jacks.

Noise will be output if you make connections via the digital audio jacks to a receiver or amplifier that does not have a built-in Dolby Digital decoder. In this case, be sure to set the digital output setting to "Dolby Digital → PCM" in the digital output (DIG. OUTPUT) menu. Use the digital output menu to select the type of digital output most appropriate for the system you are using. (Refer to "About the main menu" on page 20 and "Setting the digital output format" on page 26)

#### **DIGITAL OPTICAL OUT**

The digital signal is transmitted as light pulses through a fiber-optic cable.

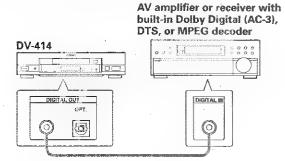
- Use to connect to an AV amplifier or receiver with built-in Dolby Digital (AC-3), DTS, or MPEG decoder.
- Use a fiber-optic cable (not supplied) to connect the digital optical output on the player to the digital optical input on an AV amplifier or receiver.



# **DIGITAL OUT (Coaxial)**

The digital signal is transmitted electronically through a coaxial cable.

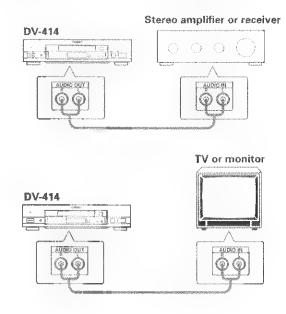
- Use to connect to an AV amplifier or receiver with built-in Dolby Digital (AC-3), DTS, or MPEG decoder.
- Use a coaxial cable (not supplied) connect the coaxial digital output on the player to the coaxial digital input on an AV amplifier or receiver.



# **Analog Audio Connection:**

#### **AUDIO OUT**

- Make analog audio connections to a stereo amplifier or receiver.
- Analog audio connections can also be made to a TV or monitor with stereo input jacks.
- Use the supplied audio cable to connect the AUDIO OUT on the player to the audio input on the stereo amplifier or receiver.
- When making analog audio connections, be sure to match the color of the plugs with the color of the jacks (red and white).



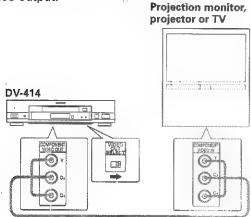
# **Video Connections**

This player features three types of video output possibilities. Component video, S-video, and standard video connections are possible. Check the manual that was supplied with your TV or monitor to determine the best possible connection for your system.

The factory preset screen aspect ratio is set for a wide screen (16:9 aspect ratio). If the video presentation appears irregular (squeezed or stretched) on your TV or monitor, check that the aspect ratio set in the INITIAL SETUP menu corresponds to the TV or monitor you are using (page 25).

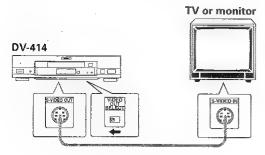
# **COMPONENT VIDEO OUT**

- Make component video connections to magnetion monitor, projector or TV with component inputs to produce a higher quality video image.
- Use component video cables or 3 video cords (not supplied) to connect the COMPONENT VIDEO OUT jacks on the player to the component jacks on the monitor.
- When making component video connections, makes sure to set the VIDEO OUT SELECT switch on the rear panel of the player to the right to assign component video output.



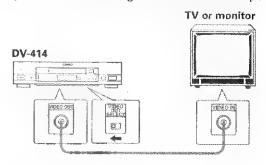
#### S-VIDEO OUT

- Make S-video connections to a TV or monitor with S-video input to produce a higher quality video image.
- Use an S-video cable (not supplied) to connect the output on the player to S-video input on the TV or monitor.
- When making S-video connections, be sure to set the VIDEO OUT SELECT switch on the rear panel of the player to the left to assign S-video output.



#### **VIDEO OUT**

- Make video connections to a standard TV or monitor with a video input jack.
- Use the supplied video cable to connect the video output jack on the player to the video input on the TV or monitor
- Be sure to match the color of the plug with the color of the jack (yellow).
- When making video connections, make sure to set the VIDEO OUT SELECT switch on the rear panel of the player to the left to assign standard video output.



# TV SYSTEM switch (except for U.S. and Canadian models)

Video output changes as follows according to the playback disc's recorded format.

NTSC → PAL, PAL → NTSC conversion is possible on Video CDs. PAL → NTSC conversion is not possible on DVDs. When the TV SYSTEM switch is set to the AUTO position, the disc's format will be output as is. When a CD or disc is not loaded, the previous video output format will be selected.

Disc		Output format		
Туре	Format	Position of TV SYSTEM switch		
		NTSC	PAL	AUTO
DVÐ	NTSC	NTSC	MOD. PAL	NTSC
	PAL		PAL 🤫	PAL
Video CD	NTSC	NTSC	MOD, PAL	NTSC
	PAL	NTSC	PAL	PAL
CD, No disc		NTSC	PAL	NTSC or PAL

# About MOD. (Modulation) PAL

- \*SHRINK
- Most models of the newly developed countdown PAL TV system detect 50 Hz (PAL)/60 Hz (NTSC) and automatically switch vertical amplitude, resulting in a display without vertical shrinkage.
- If your PAL TV does not have a V-Hold control, you
  may not be able to view NTSC disc because the
  picture may roll. If the TV has a V-Hold control, adjust
  it until the picture stops rolling. On some TVs, the
  picture may shrink vertically, leaving black bands at
  the top and bottom of the screen. This is not a
  malfunction; it is caused by the NTSC → PAL
  conversion.

# Playing DVDs, Video CDs and CDs

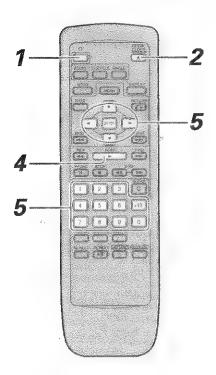
DVD/Video CD/CD

Before you can start to enjoy the digital audio and video on DVD discs, use the Pioneer player's internal menus to help you set up your system for optimal DVD performance. The initial set-up menu on pages 20 to 26 outlines various options related to the configuration and operation of your system.

Also, refer to "Setting the aspect ratio of your TV" on page 25 and "Setting the digital output format" on page 26 to make sure that the internal settings related to audio and visual presentation correspond to your system. Having made these settings, you are now ready to start using the player to view DVD discs.

memo

- Noise is output if you made digital audio connections to a receiver or amplifier that does not have a built-in decoder. Check that the digital audio output format selected in the OUTPUT SETUP menu (page 26) corresponds to the audio set-up you have connected.
- The factory preset screen aspect ratio is set for a wide screen (16:9 aspect ratio). If the video presentation
  appears irregular (squeezed or stretched) on your TV or monitor, check that the aspect ratio set in the
  INITIAL SETUP menu (page 25) corresponds to the TV or monitor you are using.



# 1 Press ( ( STANDBY/ON on the front panel).

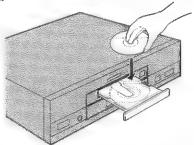
The STANDBY indicator on the player turns off.

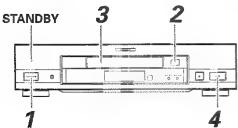
# 2 Press OPEN/CLOSE (▲ on the front panel).

The disc tray comes out.

# 3 Load a disc.

Load a disc with the label side facing up, using the disc tray guide to align the disc.





# 4 Press PLAY ➤ (►/II on the front panel).

- The disc tray closes, and playback begins.
- Depending on the disc, a menu may be displayed. If a menu is displayed, proceed to step 5.

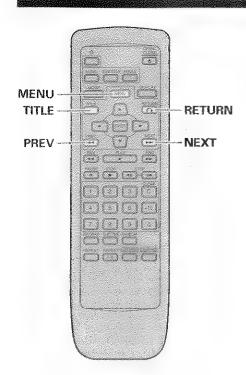
# 5 Select the item you want to view.

· When a DVD is loaded

Select the item with the direction buttons  $\blacktriangleleft/\triangleright/\triangle/\blacktriangledown$  or the number buttons then press ENTER.

· When a Video CD is loaded

Use the number buttons to select the item.



# When a menu screen is displayed

Operate with the remote control unit.

Menu screens are displayed for DVDs that have menu screens or Video CDs that include Playback Control (PBC).

Example: When a DVD that has menu screens is loaded



Example: When a Video CD that has Playback Control is loaded





· To return to the menu screen

Although this differs depending on the disc, pressing TITLE, MENU or RETURN during DVD playback or RETURN during VideoCD playback will return the screen to the menu screen.

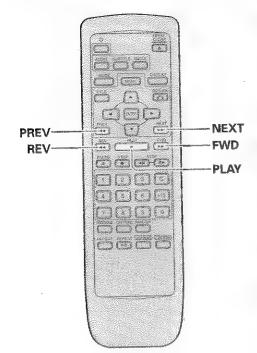
 When the Video CD has more than one menu, pages can be advanced to or returned to with PREV I◄◄ or NEXT ►►I.

# Tips

Video CDs can be played back without displaying menu screens. For example, to play back from track 1, press number button 1 during the stop mode.

# Chapter (Track) Skip Forward/Skip Back

DVD/Video CD/CD



# Advancing to the next chapter (track)

# Press NEXT ▶► (▶►► on the front panel).

- · Press to skip forward to the next chapter (track).
- When a CD is loaded, you can advance more than one track forward by pressing and holding NEXT ►► and releasing when the desired track appears in the display.

# Skipping back to the previous chapter (track) Press PREV I◄◀ (I◄◀◄◄ on the front panel).

- Press once to skip back to the start of the chapter (track) currently playing.
- · Press twice to skip back to the start of the previous chapter (track).
- When a CD is loaded, you can skip back to the track you want to hear by pressing and holding PREV I◄◄ and releasing when the desired track appears in the display.

# Fast forward scanning

# Press and hold FWD ▶► (▶►►► on the front panel) during playback.

- Release FWD >> when you reach the desired location. Normal playback resumes.
- When the "SCAN" indicator on the screen changes from flashing to lit, fast forward scanning will continue even if the button is released. When the desired location has been reached, press PLAY >.

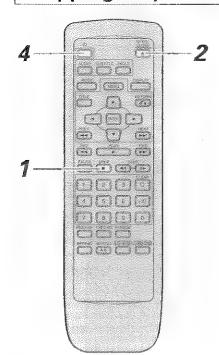
# Fast reverse scanning

# Continue pressing REV ◄◄ ( ◄◄◄◄ on the front panel) during playback.

- Release REV 
   when you reach the desired location. Normal playback resumes.
- When the "SCAN" indicator on the screen changes from flashing to lit, fast reverse scanning will continue even if the button is released. When the desired location has been reached, press PLAY ►.

# **Stopping Playback and Switching Power Off**

DVD/Video CD/CD



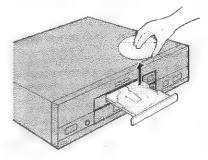
1 Press STOP m (m on the front panel).

Playback stops.

2 Press OPEN/CLOSE ≜ (≜ on the front panel).

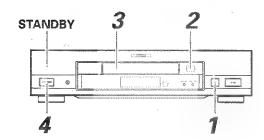
The disc tray comes out.

3 Remove the disc.





When  $\mbox{\scriptsize OSTANDBY/ON}$  is pressed, the disc tray goes back in, and the STANDBY indicator lights.



# **About the Main Menu**

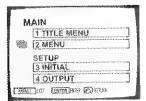
DVD/Video CD/CD

The main menu is the menu used for selecting the Title menu screen, Menu screen and Set-up screen.

To view the main menu screen, load a DVD in the disc tray. Because many DVD discs begin playing automatically, press STOP , and then press MENU. When the player is in the stop mode, just press MENU.

When loading a DVD disc for the first time, make sure that the volume is turned down. The factory preset setting for the digital audio output is Dolby Digital (AC-3). If you made digital audio connections to a receiver or amplifier that does not have a built-in Dolby Digital (AC-3) decoder, noise is output that could damage your speakers.

DVD



# In the Title menu screen:\*

Titles can be selected and played back. (Title search)

#### In the Menu screen:\*

Chapters (songs), subtitles, audio and angles within a title can be selected.

## In the Initial setup screen:

The various functions of this player can be set up using the screen displays.

# In the Output setup screen:

The audio format to be output from the digital output terminal can be selected.

\*On discs recorded with menus, menu operation will differ depending on the disc.

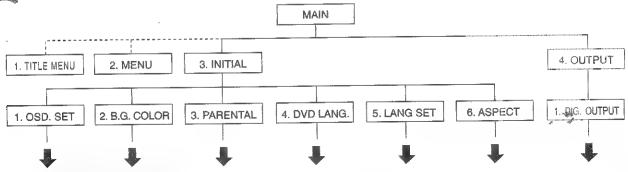
MAIN

Video CD or CD





Use the menu screen hierarchy shown below to locate individual SET UP menu screens.



# To return to initial settings

To return all settings to their initial modes once they have been changed, turn the power off and, while holding down STOP ■ of this unit, press ©STANDBY/ON. This will also cancel "Picture quality/Tone setup", "Condition Memory", "Last memory", and the code number of "Parental level".

# About disc operation

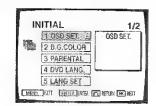
On some DVD discs, operation methods may change or specific operations may be prohibited according to the intentions of the disc's manufacturer. Depending on the disc, operation methods may differ, or some specific functions may not be operable. When operation of a function prohibited by the disc is attempted on a PIONEER DVD player, a prohibited mark will be displayed on the screen. On discs where interactive operation is possible through menu operation or during playback, some functions such as repeat or program may not be possible. On PIONEER DVD players, a prohibited mark will be displayed on the screen in these instances.

- Disc prohibited mark
- Prohibited by player mark



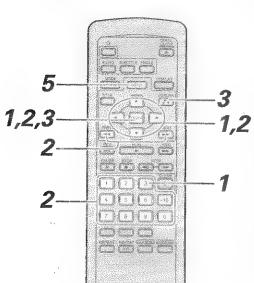
# Operating the INITIAL SETUP menu screen

The INITIAL menu contains options related to general DVD playback and the performance of this player. Settings made in this menu can either be used for all of your DVDs or changed to correspond to individual DVD discs via Condition Memory (refer to page 29). In this menu, you can set up on-screen display options (OSD.SET), change the background screen color (B.G. COLOR), parent restriction level (PARENTAL), the language you want DVD menus to display (DVD LANG), the audio and subtitle language you want to use (LANG SET) and the aspect ratio of the monitor/TV you are using (ASPECT).



1 Use the direction buttons 
/▶/▲/▼ to select INITIAL in the main menu and press ENTER or press the number button 3.

The INITIAL menu is displayed.



- 2 Select item numbers with the direction buttons ◄/►/▲/ ▼ and pressing ENTER or use the number buttons.

  - Making selections with the number buttons or with the direction buttons 
     /△/▼ and pressing ENTER, displays the selection screen for that setting.
  - Use NEXT ►► and PREV I to select the appropriate menu page.
- 3 Press RETURN to memorize the setting and go back to the previous menu.

Pressing ENTER or the number buttons on the selection screen will memorize the settings and exit the mode.

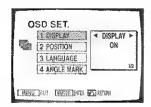
- 4 Repeat steps 2 and 3 to make changes to other settings.
- 5 Press MENU to exit the mode.
  - New settings are canceled if the main menu screen is closed by pressing MENU before pressing RETURN or ENTER to memorize settings.
  - · Pressing RETURN on the main menu screen exits the mode.

# INITIAL SETUP

In the INITIAL menu, you can set up on-screen display options (OSD.SET), parent restriction level (PARENTAL), the language displayed by the DVD player (DVD LANG), the language you want DVD and Video CD disc menus to display (LANG SET) and the aspect ratio of the monitor/TV you are using (ASPECT).



In the explanation of each setting, the setting listed first is the initial factory setting (\* is marked).



# Setting up the on-screen display (OSD, SET)

#### 1 DISPLAY

Operation indicators (play, stop, etc.) can be displayed or not displayed by selecting ON or OFF.

Settings: ON\* (Operation displays appear.)

OFF (Operation displays do not appear.)

#### **2 POSITION**

When watching conventional software on a wide screen TV, the operation display is at the very top of the screen, and you may not be able to see it. Changing the position of the display lets you see operation indicators clearly even on a wide TV screen.

Settings: NORMAL\* (When using a conventional (4:3) TV)

WIDE (When using a wide screen TV)

#### 3 LANGUAGE

This setting is used to establish the language which operation indicators and menu screens display.

Settings: English\*

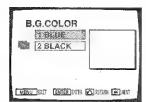
French (U.S. and Canadian models only)
Spanish (U.S. and Canadian models only)

#### **4 ANGLE MARK**

When a picture recorded in different angles is played back, so is displayed. This setting lets you see clearly whether the playback picture is recorded with angles or not.

Settings: **ON\*** (ເ≍ is displayed.)

OFF (Not displayed.)

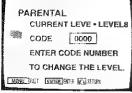


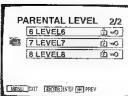
# Setting the background color (B.G.COLOR)

You can select a blue or black background for both menu displays and for the display which appears when playback has stopped.

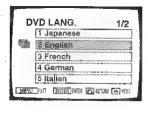
Settings: BLUE\*

**BLACK** 









# **Setting the Parental Lock level (PARENTAL)**

This lets you control what your children watch by blocking out undesirable material.

This player lets you use Parental Lock if the disc has a parental code recorded on it. With Parental Lock capable discs, you can skip material you feel is inappropriate for your children. For details, refer to the instructions that come with the disc.

Once you have input secret 4-digit number, the viewing level (user restriction level) cannot be changed unless the same four numbers are input.

Be sure not to forget your secret number. If you should forget it, reset the system, and enter a new secret number (page 29).

#### 1 Press ENTER.

The code number input screen is displayed.

- 2 Input the code number with the number buttons.
- 3 Select a level between level 1 to 8 with the direction buttons.

#### 4 Press ENTER.

Viewing restrictions are applied to the disc.

# 5 On discs where viewing restrictions have been set:

- The screen shown on the left is displayed when PLAY ➤ is pressed to start playback.
- Playback will start after the code number has been input by pressing the number buttons, and ENTER has been pressed.

# Setting the DVD disc menu screen language (DVD LANG.)

Some DVDs include the same menu screens recorded in various languages. On these types of discs, the language you want menu screens to display can be selected in the DVD LANG. menu.

Setting: English\*

Select the language with the direction buttons and press ENTER.

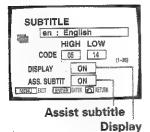
# LANG SET AUDIO 2 SUBTITLE 3 AUTO LANG 4 SUBT. OFF MENUL SET SELECTED SET SALES

Basic audio



Code setup screen





LANG SET

1. AUDIO
2. SUBTITLE
SAUTO LANGP
ON
SAUTO LANGP
12

4. SUST, OFF

NESS, DAT ENTERDATE (ALBERT



# Setting language preferences (LANG SET)

#### 1 AUDIO

The audio language that you normally listen to can be selected from the various audio languages on a disc. Even when the audio language is changed during playback, the language selected at this setting will be selected when the disc is changed.

Settings: English\*

# Select a language from the 136 different languages.

- · Press ENTER to display the code input screen.
- Select the language with the direction buttons 
   √► on the remote control
   unit
- To select the language using the language code, refer to the language code list (page 48). Use direction buttons ◄/➤ to switch high-order (HIGH) and low-order (LOW) input codes in the menu and use the number buttons to select the code number of the language you want. (To select numbers greater than 10, use the +10 button)

#### 2 SUBTITLE

The subtitle language that you will normally display can be selected from the subtitles programmed on a disc. Even when the subtitle language is changed during playback, the language selected at this setting will be selected when the disc is changed.

Settings: English\*

# Select a language from the 136 different languages.

- · Press ENTER button to display the code input screen.
- Select the basic subtitle with the direction buttons 
   on the remote control unit.
- To select the language using the language code, refer to the language code list (page 48). Use direction buttons ◄► to switch high-order (HIGH) and low-order (LOW) input codes in the menu and use the number buttons to select the code number of the language you want. (To select numbers greater than 10, use the +10 button)
- Use direction buttons ▲/▼ to select DISPLAY, and then use direction buttons ◄/► to switch subtitles ON or OFF.
- Some discs provide assist subtitles which provide additional explanations
  of scenes for those who are hard of hearing. Switch ASS. SUBTIT to ON
  to display these subtitles from the beginning.

#### **3 AUTO LANG**

When the auto language function is selected, foreign movies are shown with original audio and your selected subtitle language, and domestic movies are shown with original audio and no subtitles.

Settings: ON\*

OFF (Basic audio, basic subtitle setting.)

If the selected audio language and the subtitle language are not the same, if the subtitle display is set to OFF, or if the ASS. SUBTIT is set to ON, the AUTO LANG function does not operate.

## 4 SUBT. OFF

This setting allows you to view subtitles on DVD discs containing subtitle information which is not automatically displayed on the screen.

Settings: SEL. SUBTL\* (The selected subtitle language is used)
WITH AUDIO (The selected audio language is used)

# Setting the aspect ratio appropriate for your TV (ASPECT)

The width-to-height ratio of conventional TVs is 4:3, while the width-toheight ratio of wide screen and high-definition TVs is 16:9. This width-to-height ratio is called the aspect ratio.

When viewing software recorded in the wide mode, the image's height to width ratio can be switched to match the TV being used.

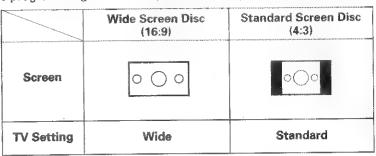
Settings: Wide\*

Pan & Scan Letter box

# When using a wide screen TV (16:9 width-to-height aspect ratio)

Select "Wide" in the ASPECT menu. (The initial factory setting is set to "Wide".)

Discs may be recorded in more than one screen format. Following the chart below, make screen aspect adjustments on your wide screen TV according to the programming on the disc you are viewing.



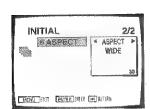
# When using a standard TV (4:3 width-to-height aspect ratio)

Select "Letter box" or "Pan & Scan" in the ASPECT menu. Following the chart below, make screen aspect adjustments according to the programming on the disc you are viewing.

	Wide Screen Disc (16:9)	Standard Screen Disc (4:3)
	Cetter box	000
Screen	Pan & Scan	No setting required (standard 4:3 screen presentation regardless of setting)
TV Setting		



- Whether aspect can be switched or not depends on the disc. Please refer to the information written on the disc jacket, etc.
- The Letter box format places black bars at the top and bottom portions of the screen to provide the full wide screen presentation of a movie on a standard TV (4:3 screen ratio).
- The Pan & Scan format crops both sides of the wide screen presentation to use the full standard TV screen.
- Some discs may not include the screen format selected in the ASPECT menu. When this occurs, the standard TV screen format available on the disc is automatically selected.



INITIAL ASPECT.

INITIAL

MENU INT ENGLESORS HERITA

MENU EXT ENTER EXTER ME RETER

◆ ASPECT LETTER BOX

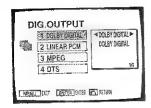
◆ ASPECT ▶

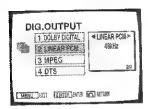
**PANASCAN** 

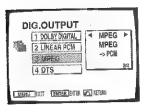


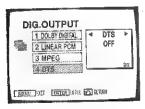
# Setting the digital output format (DIG. OUTPUT)

You can choose digital audio output which is compatible with the AV amplifier connected via a digital output jack. Select OUTPUT in the main menu to display the digital output menu screen (DIG. OUTPUT).









#### 1 DOLBY DIGITAL

Select DVD's Dolby Digital audio (3-dimensional audio used in theaters etc.) or LINEAR PCM (same digital audio as that on CD).

Settings: DOLBY DIGITAL\* (The Dolby Digital signal is output as is (when an amplifier with built-in Dolby Digital (AC-3) decoder is used).) DOLBY DIGITAL → PCM (Provides Linear PCM sound with both Dolby Digital and Linear PCM sources (when a regular amp or Dolby Pro Logic amp is used).)

#### 2 LINEAR PCM

96 kHz: PCM audio discs with a 96 kHz sampling frequency are played back at the 96 kHz high quality sound setting. 48 kHz discs are played back at

48 kHz: Discs with a 96 kHz sampling frequency are played back at a compressed 48 kHz with this setting. 48 kHz discs are played back at 48 kHz.

- Audio is output from both digital and analog outputs to achieve the desired sampling frequency.
- Some 96 kHz DVDs are copy protected. With this kind of disc, no signal is output from the digital output terminal.

Settings: 48 kHz\* 96 kHz

#### 3 MPEG

When a decoder or amplifier that has an MPEG input jack is used, the audio output from this unit's digital output jack can be used.

Select DVD's MPEG or linear PCM signal.

Settings: MPEG → PCM\* (Output is in the linear PCM standard whether the signal is an MPEG signal or Illnear PCM compatible signal.) MPEG (The MPEG signal is output.)

# 4 DTS (Digital Theater System)

When using an amplifier that has a DTS input jack, the DTS signal can be set to be output (ON) or not output (OFF) for DVDs that have been recorded with DTS signals.

Settings: OFF\* (not output)

ON (output DTS signals)

#### Note

Do not change the output setting if you are not sure which system your amplifier is compatible with.

# **Changing Picture and Sound Quality**

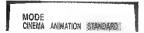
DVD/Video CD

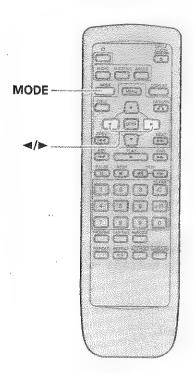
The MODE function adjusts picture and sound quality in playback of DVD and Video CD discs. The setting changes as follows according to how many times MODE is pressed. Mode selection options will be shown according to the type of disc being used.

#### DVD



## Video CD





# Changing picture quality (Cinema Mode/Animation Mode)

This lets you select the ideal picture quality for watching movies, animation and other video media.

During playback, press MODE to select "MODE" and press direction buttons ◄/▶ to select the desired effect.

#### **CINEMA**

Provides a sharp, clear black picture for images with high contrast.

#### ANIMATION

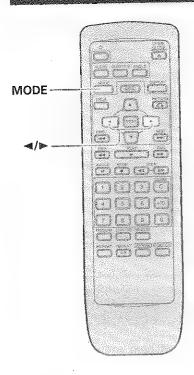
Provides images with bright, clear colors.

# STANDARD

Returns you to normal picture quality and display.



Depending on the contents of the software and the TV used, the picture may be unclear in CINEMA and/or ANIMATION mode. In this case, switch to the Standard mode.



# Changing the still picture condition of DVD's

This lets you view a clear still-image when DVD disc playback is paused.

During playback, press MODE twice to select "PAUSE MODE" and press direction buttons ◄/▶ to select the desired effect.

#### Field

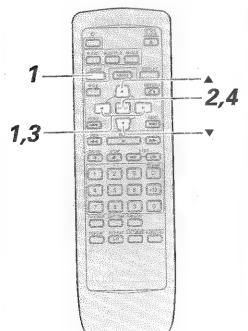
Picture shake will be eliminated during a paused picture.

#### Frame

To obtain higher picture quality.

#### Auto

Selects field or frame automatically according to the disc.



# Changing the dynamic range (AUDIO D.R.C.) of DVD's

AUDIO D.R.C. stands for Audio Dynamic Range Compression. DVDs provide sound with wide dynamic range. Switch AUDIO D.R.C. ON if you find dialog or other sounds hard to hear when listening on your stereo system or TV.

- 1 During playback, press MODE three times to select "AUDIO D.R.C." and press direction buttons ◄/► to, select "ON".
- 2 Press ENTER when "ON" is selected.

AUDIO D.R.C. ON
MIN HALLISTEE MAX

3 Adjust the amount of change with the direction buttons

MIN: The dynamic range becomes narrower. MAX: The dynamic range becomes wider.

AUDIO D.R.C. ON
MIN (++++++++) MAX

4 Press ENTER.

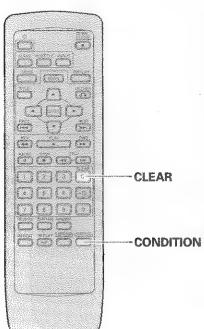


If ▲ or ▼ is pressed during step 3, change will be in the order of "ON" or "OFF".

# Memorizing Settings for Often Viewed DVDs (Condition Memory)

DVD

You can store in memory settings for DVDs you often watch. Settings remain in memory even if you remove the disc from the player, or switch power to the player to STANDBY. If you load a disc that has its settings memorized, the CONDITION indicator lights. When you start playing the disc, the memorized settings are automatically recalled.



# Press CONDITION during playback.

Settings are memorized for the disc currently playing.

#### The following seven settings are memorized:

Position (page 22)
Parental Level (page 23)
Multi-Aspect (page 25)
Mode (page 27)
Multi-language (page 32)
Multi-Language subtitles (page 33)
Multi-Angle (page 34)

# When a disc that has memorized settings is loaded

"COND. MEM." will appear on the screen, and the previously memorized settings will be selected.

# **Erasing the recorded contents**

Load the disc that has memorized settings, and press CLEAR while "COND. MEM." is being displayed. The disc's recorded data will be erased.

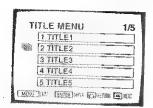


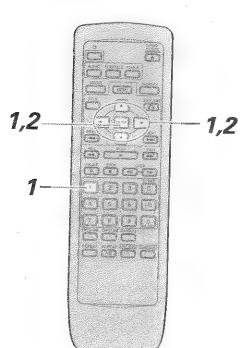
- · Settings are stored in memory for use any time.
- You can store settings for up to 30 DVDs in memory. If you
  memorize settings for more than 30 DVDs, previously
  memorized settings are erased in chronological order from the
  least recently memorized. Subsequently, if you load II disc with
  erased settings, the settings of the most recently played disc
  are used.
- If you make changes to any of the settings memorized in Condition Memory, press CONDITION during playback to memorize new settings.
- Switching of the multi-language mode etc., is automatic on some discs.

# About the Title Menu and Menu Screens

DVD/Video CD/CD

The Title Menu screen allows you to select the title on the disc that you want to view. The Menu screen allows you to change settings related to various aspects of DVD disc performance. DVD discs are usually recorded with original interactive menus uniquely related to the content of the disc. This player's Menu screen operates with discs that have not been recorded with menus.



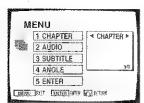


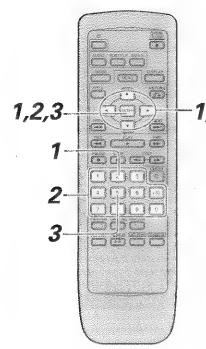
# Selecting titles in TITLE MENU

1 Use the direction buttons 
/►/▲/▼ to select TITLE MENU in the main menu and press ENTER, or press the number button 1.

The TITLE MENU screen is displayed.

- 2 Use the direction buttons 
  ✓/►/▲/▼ to select the title you want to view and press ENTER or press the number of the title as it appears in the menu using the number.
  - Title playback starts immediately.
  - The selection screen displayed is the same as the one used when performing a direct search using title numbers (page 37).





# Menu screen contents and operation

# In the Chapter screen:

One chapter within a title can be selected and played back.

#### In the Audio screen:

Audio contents can be selected on discs that include more than one audio language or audio type.

#### In the Subtitle screen:

Subtitle contents can be selected on discs that include subtitle information.

# 1.2.3 In the Angle screen:

The scene angle that you want can be selected on discs that include scenes that have been filmed from various angles.

#### **ENTER**

Completes the setting of changes to the above items.

1 Use the direction buttons 
/▶/▲/▼ to select MENU in the main menu and press ENTER, or press the number button 2.

The MENU screen is displayed.

- Select item numbers with the direction buttons ◄/►/▲/
   ▼ and pressing ENTER or use the number buttons.
  - When the 

    and 

    are displayed in the window next to the list of settings, settings can be changed with the direction buttons 

    /▶.
  - Making selections with the number buttons or with the direction buttons 
     /►/▲/▼ and pressing ENTER, displays the selection screen for that setting.
- 3 Use the direction buttons 
  ✓/▲/▼ to select ENTER or press the number button 5.

Selecting ENTER in the MENU screen saves changes and quits the mode.

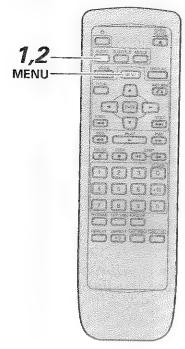


- Depending on the content programmed on the disc, this player's TITLE MENU and/or MENU screen may not be displayed.
- When this player's MENU screen cannot be displayed, setting changes can be made by using buttons on the remote control. Playback options that can be changed using buttons on the remote control are described on the following pages.
- Some of the settings on the disc cannot be changed. In this
  case, the mark is displayed.

# Selecting Languages (Multi-Language)

ovo

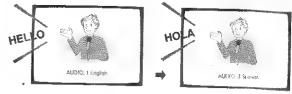
Dolby Digital, PCM, and other audio data can be recorded on DVDs in a number of languages or audio tracks, letting you choose the desired language or audio.



1 Press AUDIO during playback.



2 Press AUDIO repeatedly to select the desired language.



#### Notes

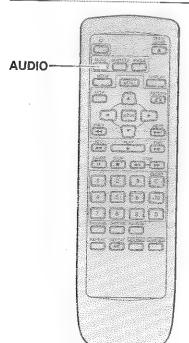
- You cannot switch languages if there is only one language recorded on the disc.
- Switching the audio language may not be possible with some titles. In this case, the mark is displayed.

#### **Tips**

For some titles, selection can be made using the menu. In this case, press MENU while the indicator is displayed to display the menu screen and then make your selection.

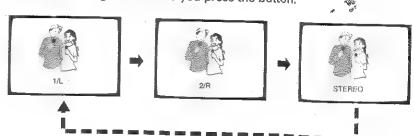
# **Changing Audio Type**

Video CD/CD



# Press AUDIO during playback.

Audio type changes each time you press the button.



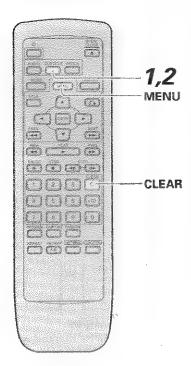
## Tips

With karaoke and other discs, set the appropriate audio type for singing and accompaniment after referring to information on the disc jacket or accompanying material.

# Selecting a Subtitle Language (Multi-Language Subtitles)

DVD

You can select a desired subtitle language with DVDs that have subtitle data in multiple languages recorded on them.

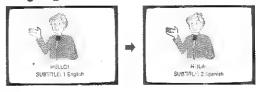


# 1 Press SUBTITLE during playback.

You can also make your selection from a menu.



# Press SUBTITLE repeatedly to select the desired language.



#### Notes

- The subtitle language can not be switched if the subtitle language is not recorded, or if only one language is recorded.
- Switching the subtitle language may not be possible with some discs. In this case, the mark will be displayed.

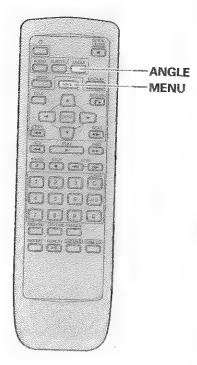
#### Tips

- To clear subtitles during playback, press CLEAR after first pressing SUBTITLE. You can also clear subtitles by selecting OFF in the SUBTITLE menu display.
- Subtitles can be cleared by selecting LANG SET in the INITIAL menu, and setting SUBTITLE to "OFF" (refer to page 24).
- For some discs, subtitle language selection can be made using the menu.
   In this case, press MENU while the indicator is displayed, display the menu screen and make your selection.

# Viewing from a Desired Camera Angle (Multi-Angle)

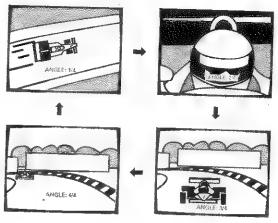
DVD

You can choose a desired viewing angle with DVDs recorded with images shot from different angles.



# Press ANGLE during playback.

The camera angle changes each time you press the button.



# To check whether or not the disc is recorded with angles:

The jacket of discs that are recorded with angles will be marked with the When locations on discs that are recorded with angles are played back, the mark can be displayed.

To cancel the angle mark, select the on-screen display (as DISPLAY) in the INITIAL menu and set ANGLE MARK to "OFF" (refer to page 22).

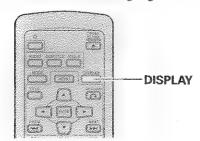
#### Tips

- You can use the Multi-Angle function only with discs featuring recordings of images shot from different camera angles.
- During Multi-Angle playback, the Angle indicator on the player lights.
- For some discs, selection can be made using the menu.
   In this case, press MENU while the indicator is displayed to display the menu screen and then make your selection.

# **Viewing Disc Information**

DVD/Video CD/CD

Use DISPLAY to get current information about the disc currently loaded. You can get information about the number of chapters/tracks on a disc, elapsed playback time, and remaining time. When using DVD discs, you can also check the current audio and subtitle languages as well as the transmission rate.



# Press DISPLAY during playback or in the STOP mode.

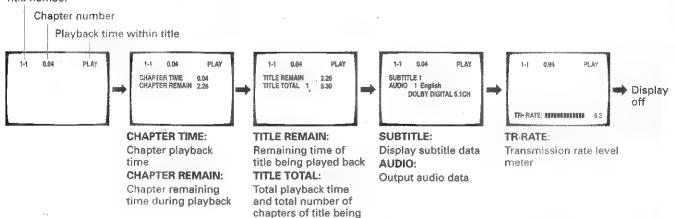
- · Disc information is displayed.
- The display information is superimposed on the playback image.
- The display changes as follows each time the button is pressed.
- Some displays may not be displayed depending on the type of disc.

#### Note

Information may not be displayed for some discs.

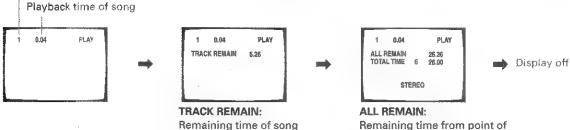








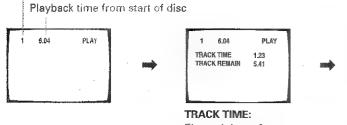




played back

#### Video CD

#### Track



Elapsed time of song being played back

#### TRACK REMAIN:

being played back.

Remaining time of song being played back

playback to end of disc.

# **TOTAL TIME:**

Total playback time and total number of tracks.



#### ALL REMAIN:

Remaining time from point of playback to end of disc

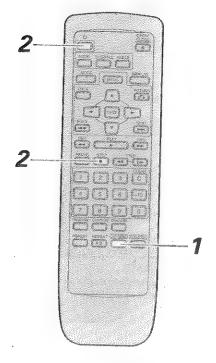
#### TOTAL TIME:

Total playback time and total number of tracks

# Continuing Playback from Where You Stopped

DVD/Video CD

This function is convenient when you want to continue viewing a disc from the point where you were watching before.



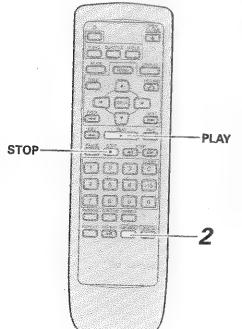
# Memorizing the place where you stopped watching

**1** Press LAST MEMO during play.

The LAST MEMORY indicator lights on the player.

Press <sup>()</sup> to turn the power to standby, or stop playback with STOP ■.

Once memorized, the memorized point will be recalled even if the power is turned off, or if the disc is ejected. Points on up to 5 discs can be memorized, and those points are recalled the next time any of the discs are played back.



# Resuming playback from where you stopped

1 Load a disc that has a Last Memory point memorized.

Some DVD discs will start playback automatically when loaded. In this case, press STOP ■ to stop playback.

Press LAST MEMO while in the stop mode.

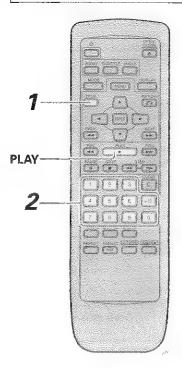
The disc begins playback at the memorized point.



- Last Memory mode may not function for some DVD discs.
- If you register more than five DVDs, details of the latest disc are memorized, while details of the least recent disc (the disc you registered first) is erased.
- Even with a disc you have memorized with Last Memory, playback begins at the start of the disc if you press PLAY
- When you continue playback from the point where you stopped, Last Memory is automatically canceled for that disc.
- This function is for playback of DVDs only. You cannot use it with CDs.
- When a Video CD is ejected, memorized data will be cleared.
- When PBC playback is engaged on Video CDs, continuous playback may not be possible. To stop the PBC playback, press the desired track number button while in the stop mode.

# Searching for a Desired Video Scene (Title Search)

DVD

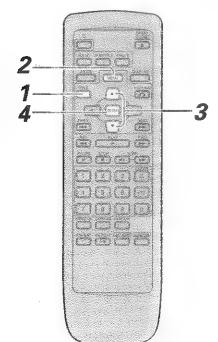


# Direct search using title numbers

- 1 Press TITLE. (During the stop mode, proceed to step 2 without pressing TITLE.)
- 2 Press the number buttons of the desired title.
  - To select title number 3, press 3.

TITLE 3

- When selecting title number 10, press +10 → 0
- Pressing and holding TITLE while the TITLE number is flashing will advance the TITLE number one by one. Selection can be made by advancing to the desired number and pressing PLAY >.



# Searching with the menu

1 Press TITLE.

During the stop mode, proceed to step 3.

- 2 Press MENU.
- 3 Select a title number using the direction buttons ▲/▼.
- 4 Press ENTER.

Playback of the selected title begins.



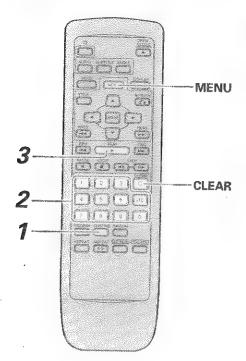
- Direct selection is also possible using the number buttons. The selected title will begin playback immediately.
- For some discs, selection can be made using the menu.
   In this case, press MENU while the title indicator is displayed to display the menu screen and make your selection.

- · You cannot play back successive titles.
- To play back multiple successive titles, program the titles using Program playback (page 40).
- With some DVDs, the search operation may stop. In this case, the mark is displayed.
- Menus may not be displayed on some discs.

# Searching for a Desired Video Scene/Audio Track (Chapter/Track Search)

DVD/Video CD/CD

You can search for a chapter within a selected title on ■ DVD or a track on a CD or Video CD. Search can be performed either by pressing the number buttons during playback, or by pressing CHP/TIME and then pressing the number buttons.



# Direct search using number buttons

Press the number button of the desired chapter number.

Example 1: When selecting chapter/track number 3, press 3.

Example 2: When selecting chapter/track number 17, press +10 -- 7.

# When the chapter/track number is large

# 1 Press CHP/TIME.

- Chapter/track numbers flash on screen.
- On DVDs, the menu may be displayed during the stop mode. In this
- case, perform a chapter number search with the menu as explained on the next page.

# 2 Select chapter numbers directly with the number buttons.

**Example 1:** When selecting chapter/track number 31, press  $3 \rightarrow 1$ .

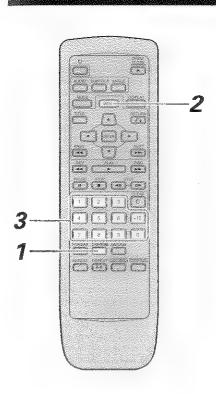
**Example 2:** When selecting chapter/track number 187, press  $1 \rightarrow 8 \rightarrow 7$ .

# 3 Press PLAY ▶.

Playback of the selected chapter/track starts.



- To clear Title, Chapter, and Time indications when they are flashing, press CLEAR twice.
- For some discs, selection can be made using the menu.
   In this case, press MENU while the indicator is aisplayed to display the menu screen and then make your selection.



#### On DVDs

# Chapter number search with the menu

1 Press CHP/TIME.

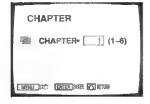
If the stop mode is engaged, proceed to step 3.

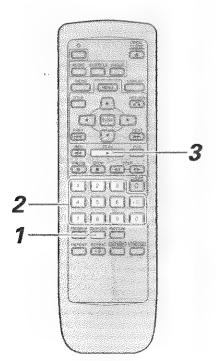
2 Press MENU.

Chapter menu is displayed.

3 Select the chapter by number buttons.

Depending on the title, the menu may not be displayed. In this case, do a direct search using the number buttons.





# Searching by time (Time search)

1 Press CHP/TIME twice.

With DVDs that do not have chapters, pressing the button once will display the time.

2 Select the desired time with the number buttons.

Example: To select 21 minutes 43 seconds

 $2 \rightarrow 1 \rightarrow 4 \rightarrow 3$ 

4

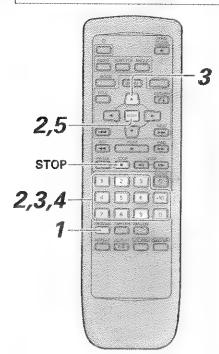
3 Press PLAY ▶.

Playback starts from the selected elapsed play time.

- · Time search is not possible with CDs.
- With DVDs, Time search may not be possible with certain discs. In this
  case, the mark is displayed.
- When performing DVD Time Search, playback may start from a slightly different time than that specified.
- · On DVDs, Time search is not possible during the stop mode.
- Search using Time search is not possible during PBC playback of Video CDs.

# Playback in a Desired Order (Program Play)

DVD/Video CD/CD



# Programming DVDs

You can program titles or chapters within a title to play back in the order you want to view them.

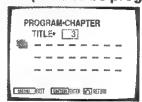
Programs with a maximum of 24 steps can be memorized.

- 1 Press PROGRAM.
- 2 Select the program type with the number buttons and press ENTER.

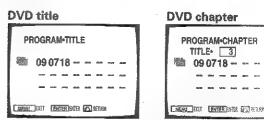
Proceed to step 4 if you select a title program.



3 When chapter programming is selected, first press the direction button ▲ to move to TITLE, then use the number buttons to select the title that contains the chapters to be programmed.



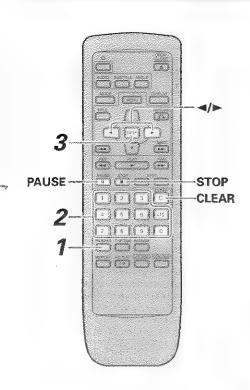
4 Programming DVD titles/chapters 9, 7, and 18 in order. Press 9, 7, +10 and 8.



# 5 Press ENTER.

- · Playback starts in the set order.
- To stop the program play, press STOP ...

- You cannot program when playing a Video CD using menu selections (during PBC).
- When programming chapters, chapters not programmed may appear on the screen, but this is not a malfunction.
- Programming may not be possible with certain DVD discs. On these types
  of discs, the mark will appear on the screen when programming is
  attempted.
- Only chapters within the same title can be programmed during chapter programming.



On Video CDs, CDs

# Program setting (Video CDs, CDs)

Programs with maximum of 24 steps can be memorized.

- 1 Press PROGRAM.
- Programming tracks 9, 7, and 18 in order.
  Press 9, 7, +10 and 8.
- 3 Press ENTER.
  - Playback starts in the specified track order.
  - To stop the program play, press STOP m.

# Programming a pause

Press PAUSE II instead of a number button.

"II" appears on the screen and the pause can be programmed.

When the wrong number button was pressed Press CLEAR, and press the correct number button.

# How to confirm, add to, or delete programs

## To confirm:

Press PROGRAM.

Programs can now be confirmed on a CD or Video CD disc.

On a DVD, select the program type (title or chapter) with the direction buttons ◄/► and press ENTER.

Programs can now be confirmed on a DVD.

#### Adding to a program:

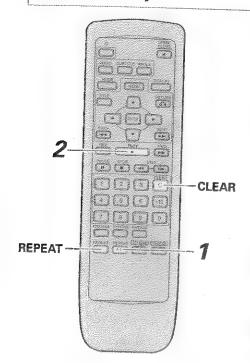
- 1 Press PROGRAM.
- 2 Press a number button, then press PROGRAM.

## Deleting a program:

- 1 Press PROGRAM.
- 2 Select the program with the direction buttons </▶, then press CLEAR.
  - · The complete program will be deleted even if the disc tray is open.
  - · Pressing CLEAR during the stop mode will clear all programs.

# Repeat Play

DVD/Video CD/CD



# Repeat play of a chapter/track

Press REPEAT once during playback of the chapter or track you want to repeat.

# Repeat play of a title

Press REPEAT twice during playback of the chapter or track you want to repeat.

- With DVDs, the title continues playing until the end, and then playback starts once more from the beginning of that title.
- With CDs and Video CDs, a disc is considered a single title, so the entire disc is repeated.

# Repeat play of a specified section

Press REPEAT A-B at the beginning and end of the section you want to repeat.

# Return to a specified location

- 1 Press REPEAT A-B at the desired location.
- When you want to return to the specified location, press PLAY ▶.

Press CLEAR to clear a specified location.



- Press REPEAT during program playback to repeat playback of the program.
- Press CLEAR to cancel repeat play. The repeat play mode is canceled, but playback continues.
- With DVDs, repeat playback between titles is no possible.

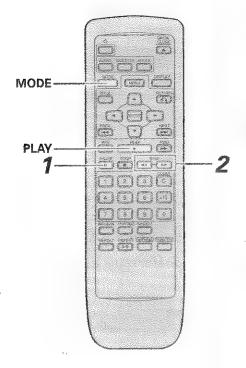
- With some DVD discs, there may be times when Repeat playback is not possible. In these cases, the mark will appear on the screen,
- With Video CDs, Repeat play is not possible during playback when the menu is displayed (PBC playback). To perform Repeat play, start playback without displaying a menu by pressing the track number to be repeated while in the stop mode, and press REPEAT.

# NOR WITH OF THOUSAND

# Still Frame/Slow Play/Frame Advance Playback

**DVD/Video CD** 

The video images on DVD and Video CD can be viewed as a still frame, played back at slow speeds and even advanced frame by frame.



# Viewing a still frame

# Press PAUSE II (>/II on the front panel).

If the still picture shakes on a DVD, press MODE twice and select the "FIELD" setting (refer to page 28).

# Viewing slow playback

# Press and hold STEP II during playback.

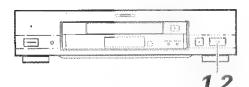
Slow playback is engaged.

Press and hold STEP **◄** during DVD playback.

Slow playback in the reverse direction is engaged.

In the reverse direction, the slow playback speed cannot be changed.

# Frame by frame advance playback: Viewing one frame at a time



1 Press PAUSE II

2 Press STEP ◄II or II►.

STEP II : The picture advances one frame each time the batton is

STEP **◄II:** The picture backs up a few frames each time the button is pressed.

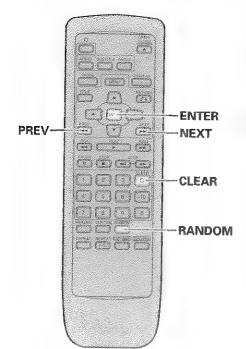


To return to normal playback, press PLAY ► (or ►/II on the front panel).

- There is no sound when viewing still frames or slow playback, or when advancing one frame at a time.
- Still frame, slow play, or frame advance playback may not be possible with certain titles. In this case, the mark is displayed.

# Random Play

DVD/Video CD/CD



#### On DVDs

# Random playback of chapters within one title

# Press RANDOM once, then press ENTER.

"RANDOM CHP" will appear on the screen, and chapters within the title will be played back in a random order.

# Random playback of titles

# Press RANDOM twice, then press ENTER.

"RANDOM TITLE" will appear on the screen, and titles will be played back in a random order.

# On Video CDs, CDs

#### Press RANDOM.

"RANDOM" appears on the screen, and random playback begins.

#### During random play:

- Press NEXT >>>, and the next randomly selected song or scene starts playing.
- Press PREV | , and playback of the current song or scene starts again from the beginning.

# Stopping random play

#### Press CLEAR.

This returns you to normal playback of chapters/tracks in order from the chapter/track currently playing.

- With Video CDs, random play is not possible during playback when the menu is displayed (PBC playback). To perform random play, start playback without displaying a menu by pressing a track number button while in the stop mode, and then press RANDOM.
- · Random play of programmed chapters/tracks is not possible.
- In the case of DVDs, random playback may not be possible with some discs.
- · Repeat playback of random playback is not possible.

# Disc Types Compatible with This Unit

This player is DVD, Video CD and CD compatible. The marks shown below are found on disc labels or on disc jackets.

- To prevent malfunction, do not use an 8 cm (3 in.) adaptor (for CDs).
- Discs other than the ones indicated below cannot be played on this unit.
- DVD that have incompatible region numbers, DVD-Audio, DVD-ROM, and CD-ROM cannot be played on this unit.

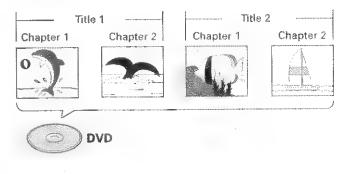
Types of playable discs and their marks	Diamete Playable s		Playback time
DVD VIDEO	DVD VIDEO		Digital audio Digital video (MPEG 2)
	12 cm (5in.)/ single-sided	1 layer 2 layer	133 min. 242 min.
DVD	12 cm (5in.)/ double-sided	1 layer 2 layer	266 min
Aibea	DVD VIDEO*		Digital audio Digital video (MPEG 2)
	8 cm (3 in.)/ single-sided	1 layer 2 layer	41 min. 75 min.
	8 cm (3 in.)/ double-sided	1 layer 2 layer	82 min. 150 min.
VIDEO CD	VIDEO CD 12 cm (5 in.)/si sided	ngle-	Digital audio Digital video (MPEG 1) Max. 74 minutes
	VIDEO CD sing 8 cm (3 in.)/sin		Digital audio Digital video (MPEG 1) Max. 20 minutes
CD COMPACT	CD 12 cm (5 in.)/ single-sided		Digital audio Max. 74 minutes
DIGITAL AUDIO	CD single 8 cm (3 in.)/ single-sided	( <u>6</u> )	Digital audio Max. 20 minutes

# Differences in Disc Composition

#### DVD

DVD discs are divided into units referred to as titles, and titles are divided into chapters. A disc which contains a movie may have only one title with many or no chapter divisions. Karaoke discs may have many titles, assigning a title to each song on the disc. Menu screens do not belong to any title.

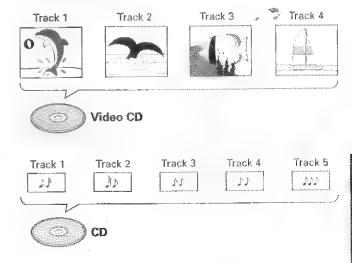
DVD player functions generally apply to titles on a disc or chapters within a selected title. The player functions available may also vary from title to title, depending on the disc. When discs have a unique title division, it should be noted that search and program functions may be affected.



## Video CD/CD

CD and Video CD discs are divided into units referred to as tracks (Video CD tracks may also be referred to as scenes). One song generally corresponds to one track. Some tracks are further divided into units referred to as indexes. Video CD discs with PBC (Playback Control) also contain menus recorded on the disc which enable easy access to the contents of the disc.

When played back on a DVD player, both CD and Video CD discs are considered to be a single title, regardless of the number of tracks.



# Disc Care

## How to hold discs

When loading or removing discs, try not to touch their playing surfaces.

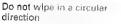


# Cleaning

Fingerprints or other dirt on the disc may affect sound and picture quality.

To clean your discs, use a soft clean cloth to wipe them. If necessary, moisten a soft cloth with diluted neutral detergent to remove heavy dirt or fingerprints.





(Concentric scratches in the disc groove tend to cause noise.)



Gently wipe from the inside toward the outer edge.

Discs must not be cleaned with record cleaning sprays, or static prevention sprays, etc. Also do not use volatile liquids such as benzine, or thinner, etc.

# Never play cracked or warped discs

The disc revolves in the player at high speed when it is played. Never play a cracked, scratched or warped disc. This may damage the player or cause it to malfunction.



# Never use CD's with special shapes

CD's with special shapes (heart-shaped CDs, octagonal CDs, etc.) cannot be played on this set.

Attempting to do so may damage the set. Do not use such CDs.



# After using discs, store them upright

After playing a disc, always remove it from the player and return it to its jacket. Then store it standing upright away from heat and humidity.

- Store discs carefully. If you store discs at an angle, or stacked on top of each other, discs may become warped even when in their jackets.
- Do not leave discs in locations such as the seat of a car, which may become excessively hot.

# **CAUTION WHEN USING THE DISC**

All rights reserved.

Unauthorized public performance, broadcasting or copying is a violation of applicable laws.

# Cleaning care

Use a soft, dry cloth for cleaning. For stubborn dirt, soak the cloth in a weak detergent solution; wring well first and wipe. Use a dry cloth to wipe it dry. Do not use any volatile agents such as benzine or paint thinner, as they may damage the surface of the player.

#### Lens cleaner

The player's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, contact your nearest PIONEER authorized service center. Lens cleaners are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

# Notes on using the optional optical cable

- Do not route cords around sharp angles. When storing, wind the cords so that they have a diameter of at least 15 cm (6 in.).
- When connecting, push all the way into the terminal.
- · Do not use cords with a length of over 3 m.
- If moisture or dust has collected on the plug, wipe it with a soft cloth before connecting.



# For Proper and Long Use of This Unit

## DO NOT MOVE THE UNIT DURING PLAYBACK

During playback, the disc rotates at high speed. Do NOT lift or move the unit during playback. Doing so may damage the disc.

#### WHEN MOVING THE UNIT

When changing places of installation or packing the unit for moving, be sure to remove the disc and return the disc table to its original position in the player. Then, press OSTANDBY/ON and switch the power to standby. Check that the "-OFF-" indication on the display goes off, then disconnect the power cord. Moving this unit with the disc loaded may result in damage to this unit.

#### INSTALLATION

- Select a stable place to the side of a TV set or stereo system to be connected to the unit.
- When using the unit with stereo system, install the speakers a little bit away from the TV.
- Do NOT install the unit on top of a TV or color monitor.
   Install the unit away from equipment that may be affected by magnetism, such as a cassette deck.
- · Do NOT place objects on top of the unit.

#### AVOID INSTALLING IN A PLACE THAT IS:

- · Exposed to direct sunlight
- · Exposed to humidity or where ventilation is poor
- Extremely hot or cold
- · Exposed to vibration
- Exposed to dust
- Exposed to oily smoke, steam or heat (for example, a kitchen)

#### DO NOT BLOCK VENTS

Do NOT use the player on top of a long-fibered carpet, bed or sofa, and do not cover it with a cloth, etc. This will prevent heat radiation and could result in damage.

#### **AVOID HEAT**

Do NOT place the unit on equipment which generates heat, such as an amplifier.

When installing the unit in a rack, place it on the lowest shelf possible (however, not where it is exposed to dust) and separated from the amplifier to avoid the heat generated by the amplifier or other audio equipment.

# CAUTION: WHEN PLACING THE UNIT IN A STEREO RACK WITH GLASS DOORS

Be sure there is ample space between the unit and the glass doors when opening the disc table using the remote control. If the disc table opens against strong resistance, such as a closed glass door, damage to the unit may result.

#### CONDENSATION

Moisture may form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, the player's performance will be impaired.

To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually. Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.



# SWITCH POWER TO STANDBY WHEN NOT USING THE UNIT

Depending on the strength of the TV or radio broadcast signal, having the TV or radio ON while power to the unit is ON may result in stripes on the TV screen or noise. However, this is not a malfunction of this unit or the TV or radio. In such a case, switch the power of the unit to standby.



#### **POWER-CORD CAUTION**

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed in such a way that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

# Language Code List

Language codes are used when setting the audio and subtitle language preferences. (See page 24)

	Language	Language-	Input-code	Input-code
ı		code	(high-order)	(low-order
	Japanese	ja	10	01
-	English	en	05	14
-	French	fr	06	18
	German	de	04	05
1	Italian	it	09	20
	Spanish	es	05	19
-	Dutch	nl	14	12
ŀ	Russian	ru	18	21
-	Chines <b>e</b>	zh	26	08
L	Korean	ko	11	15
L	Greek	el	05	12
L	Afar	aa	01	01
L	Abkhazian	ab	01	02
L	Afrikaans	af	01	06
L	Amharic	am	01	. 13
L	Arabic	ar	01	18
L	Assames <b>e</b>	as	01	19
	Aymara	_ ay	01	25
-	Azerbaij <b>ani</b>	az	01	26
_	Bashkir	ba	02	01
	Belorussian	be	02	05
	Bulgarian	bg	02	07
1_	Bihari	bh	02	08
	Bislama	bi	02	09
	Bengali, Bangla	bn	02	14
Ľ.	Tibetan	bo	02	15
L	Breton	br	02	18
	Catalan	са	03	01
	Corsidan	co	03	15
_	Czech	CS	03	19
_	Welsh	cy	03	25
_	Danish	da	04	01
-	3hutani	dz	04	26
	speranto	60	05	15
Ē	stonian	et	05	20
É	Basque	eu	05	21
	Persian	fa	06	01
	innish	fi	06	09
	·iji	fj	06	10
F	aroese	fo	06	15
F	risian	fy	06	25
1	rish	ga	07	01
0	cottish Gaelic	gd	07	04
(	Salician	gl	07	12
0	Buarani	gn	07	14
(	iujarati	gu	07	21
H	lausa	ha	08	01
_				- ·

Language	Language-	1 '	Input-code
	code	(high-order)	(low-order)
Hindi	<u>hi</u>	08	09
Croatian	hr	08	18
Hungarian	hu	08	21
Armenian	hy	08	25
Interlingua	<u>l</u> ia	09	01
Intµerlingue	ie	09	05
Inupiak	ik	09	11
Indonesian	in	09	14
Icelandic	is	09	19
Hebrew	ìw	09	23
Yiddish	ji	10	09
Javanese	jw	70	23
Georgian	ka	11	01
Kazakh	kk	11	11
Greenlandic	kl	11	12
Cambodian	km	11	13
Kannada	kn	11	14
Kashmiri	ks	11	19
Kurdish	ku	11	21
Kirghiz	ky	11	25
Latin	la la	12	01
Lingala	in	12	14
Laothian	lo	12	05
Lithuanian	lt lt	12	20
Latvian, Lettish	lv	12	22
Malagasy	mg	13	07
Maori	mi	13	, 09
Macedonian	mk	13	11
Malayalam	ml	13	12
Mongolian	mn	13	14
Moldavian	mo	43 **	15
Marathi	mr	13	18
Malay	ms	13	19
Maltese	mt	13	20
Burmese	my	13	25
Nauru	па	14	01
Nepali	ne	14	05
Norwegian	no	14	15
Occitan	oc	15	03
(Afan) Oromo	om	15	13
Oriya	or	15	18
Panjabi	pa	16	01
Polish	pl	16	12
Pashto, Pushto	ps	16	19
Portuguese	pt	16	20
Quechua	qu	17	21
Rhaeto-Romance	rm	18	13

Language	Language-	Input-code	Input-code
	code	(high-order)	(low-order) 14
Kirundi	rn	18	
Romanian	ro	18	15
Kinyarwanda	rw	18	23
Sanskrit	sa	19	01
Sindhi	sd	19	04
Sangho	sg	19	07
Serbo-Croatian	sh	19	08
Singhalese	si	19	09
Slovak	sk	19	11
Slovenian	sl	19	12
Samoan	sm	19	13
Shona	sn	19	14
Somali	so	19	15
Albanian	sq	19	17
Serbian	sr	19	18
Siswati	ss	19	19
Sesotho	st	19	20
Sundanese	su	- 19	21
Swedish	sv	19	22
Swahili	sw	19	23
Tamil	ta	20	01
Telugu	te	20	05
Tajik	tg	20	07
Thai	th	20	08
Tigrinya	ti	20	09
Turkmen	tk	20	11
Tagalog	ti	20	12
Setswana	tn	20	14
Tonga	to	20	15
Turkish	tr	20	18
Tsonga	ts	20	19
Tatar	tt	20	20
Twi	tw	20	23
Ukrainian	uk	21	11
Urdu	ur	21	18
Uzbek	uz	21	26
Vietnamese	ví	22	09
Volapůk	VO	22	15
Wolof	wo	23	15
	xh	24	08
Xhosa		25	15
Yoruba	уо	26	21
Zulu	·zu	20	4.1

# **Troubleshooting**

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Inspect the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Possible cause	Remedy
The disc comes back out even when the disc table is closed.	<ul> <li>The disc is dirty or warped.</li> <li>The disc is not placed properly on the disc table.</li> <li>Region number does not conform with this unit.</li> <li>There is condensation on the operating section of the player.</li> </ul>	<ul> <li>Refer to "Disc Care" on page 46.</li> <li>Use the disc table guide to align the disc (refer to page 16).</li> <li>If the region number on the disc does not match the number on the player, the disc cannot be used (refer to page 53).</li> <li>Allow time for condensation to evaporate If player is near an air conditioning unit, you should move the player (refer to page 47).</li> </ul>
Playback is not possible.	The disc has been loaded upside down.	<ul> <li>Check that the disc has been loaded with the label side facing up.</li> </ul>
mark appears on screen.	<ul> <li>The selected function does not operate for that disc.</li> </ul>	
mark appears on screen.	<ul> <li>The operation is prohibited by the player.</li> </ul>	
Picture playback stops and the operation buttons cannot be used.	Player malfunctions.	Stop disc playback (press STOP ■), then start playback again.
Settings are canceled.	<ul> <li>When the power is turned off by power failure or by unplugging the power cord, settings will be canceled.</li> </ul>	Before unplugging the power cord, press
No picture.	<ul> <li>The rear panel's video output switch setting is not correct.</li> <li>Connection is incorrect.</li> <li>Operation (settings) of TV or AV amplifier is not appropriate.</li> </ul>	<ul> <li>Check that the video input switch is set to the correct position for the monitor connection you are using (refer to page 15).</li> <li>Check that cord connections are correct and that plugs are firmly connected.</li> <li>Be sure that your TV, receiver, or amplifier is set up to view DVD playback.</li> </ul>
The screen is stretched or aspect does not change.	The multi aspect setting is not appropriate.	Change the aspect setting in the ASPECT menu in the INITIAL SETUP menu screen to the screen type most appropriate to the TV or monitor you are using (refer to page 25).
Picture disturbance luring playback or dark.	<ul> <li>This player is compatible with Macro- Vision System copy guard. Some discs include a copy prevention signal, and when this type of disc is played back, stripes etc., may appear on some sections of the picture depending on the TV.</li> </ul>	This is not a malfunction.

Symptom	Possible causes	Remedy
When recorded on a VCR or an AV selector, there is disturbance in the playback picture.	Due to the player's copy protection circuits, connection of this device through a VCR or an AV selector may prevent recording or cause picture problems.	
Remote control operation is not possible.	<ul> <li>The rear panel control input jack on the player is being used.</li> <li>The remote control is too far from the player, or the angle with the remote sensor is too wide.</li> <li>The batteries are exhausted.</li> </ul>	<ul> <li>Point the remote control at the component that the player is connected to (refer to page 12).</li> <li>Be sure to operate the remote from a location within its operating range (refer to page 6).</li> <li>Replace the exhausted batteries with all new batteries (refer to page 6).</li> </ul>
Audio is not output or is distorted.	<ul> <li>The DIGITAL OUTPUT's Linear PCM setting is set to 96 kHz. Digital output is prohibited on some discs.</li> <li>The disc is dirty.</li> <li>The connection plugs are not inserted fully into the terminals or are not connected.</li> <li>The connection plug or terminal is dirty.</li> <li>Audio cable connection is wrong.</li> <li>Connection is made to the stereo amplifier's PHONO input terminal.</li> <li>The pause mode is engaged.</li> <li>Stereo amplifier operation is incorrect.</li> <li>The DVD is recorded in DTS audio and noise is output at analog output jacks.</li> </ul>	<ul> <li>Be sure to make analog audio connections as well as digital connections (refer to page 14).</li> <li>Refer to "Disc Care" on page 46.</li> <li>Check that all connection plugs are firmly inserted.</li> <li>Check that the plugs and terminals are wiped clean of dirt, etc.</li> <li>Check to make sure that the audio cables are connected correctly (refer to page 14).</li> <li>Change connection to any input terminal except PHONO.</li> <li>Press PLAY ➤ or PAUSE ■ to exit the pause mode.</li> <li>Check input (CD, AUX, etc.) selector to determine if it is selected for DVD playback.</li> <li>DTS audio is only output from the digital output jacks. Connect the digital output on the player to the digital input on ■ receiver or amplifier to hear DTS audio.</li> <li>For the discs recorded in DTS format, be sure to use the digital output jacks.</li> </ul>
Noticeable difference in DVD and CD volume.	<ul> <li>DVDs and CDs use different recording methods.</li> </ul>	This is not a malfunction.

# Caution

Static electricity or other external influence may cause malfunctioning of this unit. In this case, unplugging the power cord and then re-plugging it in will usually reset the unit for proper operation. If this does not correct the problem, please consult your nearest PIONEER service center.

# Terms

# **Aspect**

Aspect ratio refers to the length to height ratio of TV screens. The ratio of a normal TV is 4:3, while the ratio of a high-definition TV or wide TV is 16:9. This allows you to enjoy a picture with wider perspective.

# Chapter number

Chapter numbers are the numbers assigned to sections of a title on the disc, similar to chapters in a book. If the disc includes chapter numbers, you can locate the section you want very quickly using chapter search and other functions.

# Component (color difference) video output

The color signal of the TV is divided into the luminance (Y) signal and the color ( $C_B$  and  $C_B$ ) signals and then output. In this way mutual interference of each signal is avoided. On a TV with component input jacks, these signals are synthesized to produce the picture.

# **Condition memory**

"Condition" refers to the various mode settings etc. On this player, various conditions, such as those set during playback, etc. can be memorized. This function allows you to play back the same disc at any time without having to reset the condition settings.

# Digital output (Coaxial)

Output of the digital audio signal is transmitted electronically using a coaxial cable. Because the signal being transmitted is digital, connection must be made to the coaxial digital input of another component. Noise will be output if connected to the analog audio inputs as the digital signal cannot be decoded.

# **Dolby Digital (AC-3)**

The maximum 5.1 channels of audio used in the surround system (Surround Digital) for movie theaters is digital data compressed by AC-3.

DOLBY

In order to enjoy Dolby Digital (AC-3) discs, this unit's digital output jack (either coaxial or optical) must be connected to the digital input jack of a Dolby Digital (AC-3) amplifier or processor.

# **DTS**

DTS stands for Digital Theater System. DTS is a surround system different from the Dolby Digital (AC-3) system. In order to enjoy the benefits of DTS discs, the digital output jack (either coaxial or optical) of this player needs to be connected to the DTS input jack of an amplifier or processor.

# Dynamic range

Dynamic range refers to the difference between the maximum conversion level for transmission/conversion of distortion free signals and noise and the minimum level limited by the equipment's capabilities. Decibel units (dB) are used.

Compressing the dynamic range raises the minimum signal level and lowers the maximum signal level. This allows you to hear voices and other low level audio signals clearly while lowering strong audio signals like the sound of explosions.

#### **MPEG**

Short for Moving Picture Experts Group. This is an international standard for compression of moving images. On some DVDs digital audio has been compressed and recorded in this format.

# Multi-angle

When you watch regular TV programs you are watching the image filmed through the TV camera. Because of this the picture is displayed on your TV from the view point of the TV camera's position. In a TV studio the image is filmed by many cameras at the same time, and one of those images is selected by the program director and transmitted to your TV. If all the filmed images were transmitted to your TV you would be able to select the camera image you want. Some DVD discs are recorded with the angles of all camera's used for filming and these can be selected using this player. These types of discs are called multi-angle discs.

# **Optical digital output**

Normally, audio is converted to an electric signal and transmitted through an electric wire from the player to the amplifier, etc. Changing this signal to digital signal and transmitting it through an fiber-optic able is called optical digital output. Similarly, optical digital input receives digital signals from external units such as the amplifier, etc.

# Parental level

This function was suggested by parents. Parental level restrictions are restrictions incorporated into titles which include scenes that parents do not wish their children to view.

# **PCM**

PCM stands for Pulse Code Modulation and is digital audio. The digital audio of CD or DVD discs is PCM.

# Playback Control (PBC)

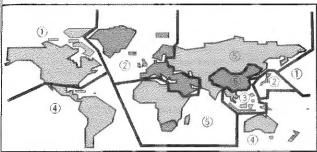
This refers to signals recorded on a Video CD (Version 2.0) enabling playback control.

You can use menus recorded on discs with PBC for easy, interactive search for desired scenes, and playback.
You can also enjoy viewing high-resolution/standard resolution still images.

# Regional restriction codes (region number)

Regional restriction codes are built in to DVD players and DVD discs for each sales region. If the regional code of the DVD player does not match one of the regional codes of the DVD disc, playback is not possible.

The region number can be found on the rear panel of the DVD player. The illustration below shows the regions and corresponding region numbers.



# Sampling Frequency

When a sound wave is converted to a digital signal, the sound is sampled and converted to data at a specific frequency rate. For example, a signal with a 96 kHz sampling rate indicates that in one second, the analog signal was sampled 96000 times to produce the digital signal.

#### Subtitle

Subtitles are language titles superimposed on movies, etc. Up to 32 different subtitle languages can be recorded on a DVD disc. The subtitle function can be used to select the language of your choice.

#### S-video

Connecting the S-video output on the player to a TV or monitor with S-video input via an S-video cable produces clearer picture reproduction by sending separate signals for the luminance and the color. These signals are then combined by the television to produce a better quality picture.

#### System control

When you connect this player via a cord with a mini plug to another Pioneer component such as a receiver or an amplifier bearing the () mark, you can control the player as though it were a component in a system. To control the player, point the player's remote control at the component that the player is connected to, and not the player itself.

#### Time number

The time number corresponds to the elapsed playback time of a disc from its beginning. When using the time search function, use the time number to locate scenes that occur at the time selected.

#### Title number

DVD discs are divided into units referred to as titles, and titles are divided into chapters. Menu screens do not belong to any title. A disc which contains a movie may have only one title with many or no chapter divisions. Karaoke discs may have many titles, assigning a title to each song on the disc.

#### TOC

TOC (Table Of Contents) information is data other than audio signal data, recorded at the beginning of a disc. As the name implies, it's like the list of contents in a book, with information such as the number of songs and playback time.

# **Specifications**

General
System DVD system and Compact Disc digital audio system
Power requirements
U.S. and Canadian models AC 120 V, 60 Hz
Other model AC 110-127, 220-240 V, 50/60 Hz
Power consumption
U.S. and Canadian models 15 W
Other model 17 W
Power consumption in standby mode
U.S. and Canadian models 1.5 W
Other model 2.0 W
Weight 2.8 kg (6 lb 3 oz)
Dimensions
$(16^{9}/_{16} \times 11^{8}/_{16} \times 4 \text{ in.})$
(Not including protruding cables, etc.)
Operating temperature+5°C to +35°C (+36°F to +96°F)
Operating humidity 5% to 85% (no condensation)
S-Video output
Y (luminance) - Output level1 Vp-p (75 Ω)
C (color) - Output level
Jacks S-VIDEO jack
N.C.A
Video output
Output level
Jacks RCA jack
•
Component video output
(Y, CB, CR)
Output levelΥ: 1.0 Vp-p (75 Ω)
C <sub>B</sub> , C <sub>R</sub> : 0.7 Vp-p (75 Ω)
Jacks
•
Audio autourt
Audio output
Output level
During audio output
Number of channels

Digital audio characteristic	
S/N ratio	
Dynamic range	
Total harmonic distortion	
Wow and flutter	Limit of measurement
(	±0.001% W. PEAK) or lower
Digital output	
Optical digital output	Optical digital jack
Coaxial digital output	RCA Jack

Accessories	
Remote control unit	. 1
AA (R6P) dry cell batteries	. 2
Audio cord	. 1
Video cord	
Power cord	. 1
Operating Instructions	. 1

CONTROL IN ...... Minijack (3.5ø)

## Note

Other terminals

The specifications and design of this product are subject to change without notice, due to improvement.





# Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

#### To establish a safe level:

- · Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

# Once you have established a comfortable sound level:

· Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

# We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

#### Decibel

Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock

# THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

at two feet.





Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

800-421-1404

Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC. CUSTOMER SERVICE DEPARTMENT P.O. BOX 1760, LONG BEACH, CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer Canadian Authorized Dealer to locate the nearest Pioneer Authorized Service Company in Canada.

Alternatively, please contact the Customer Service Department at the following address:

Pioneer Electronics of Canada, Inc. Customer Service Department 300 Allstate Parkway, Markham, Ontario L3R OP2 (905) 479-4411 1-877-283-5901

For warranty information please see the Limited Warranty sheet included with your product.

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisée Pioneer au Canada pour obtenir le nom de la Société de Service Autorisée Pioneer le plus près de chez vous. Ou encore, veuillez vous communiquer avec le Service de Clientèle de Pioneer:

Pioneer électroniques du Canada, Inc. Département de service au consommateurs 300 Allstate Parkway, Markham, Ontario L3R OP2 (905) 479-4411 1-877-283-5901

Pour obtenir des renseignements sur la garantie, veuillez vous reporter au feuillet sur la Garantie Limitée gui accompagne le produit.

Published by Pioneer Electronic Corporation. Copyright © 1998 Pioneer Electronic Corporation. All rights reserved.

PIONEER ELECTRONIC CORPORATION

4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan

PIONEER ELECTRONICS [USA] INC. P.O. BOX 1540, Long Beach, California 90801-1540

PIONEER ELECTRONICS OF CANADA, INC. 300 Alistate Parkway, Markham, Ontario L3R OP2, Canada

PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium TEL: 03/570.05.11

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia, TEL: 03-9586-6300

PIONEER ELECTRONICS DE MEXICO S.A. DE C.V. San Lorenzo Num 1009 3er piso Desp. 302 Col. Del Valle, Mexico D.F. C.P. 03100 TEL: 5-688-52-90

<99E13WF3D08>

Printed in Japan < VRB1216-A>